

CLAIMS

1. An isolated nucleic acid comprising a nucleotide sequence encoding an *C. albicans* polypeptide selected from the group consisting of SEQ ID NO: 14104 -
5 SEQ ID NO: 28206.
2. A recombinant expression vector comprising the nucleic acid of claim 1 operably linked to a transcription regulatory element.
- 10 3. A cell comprising a recombinant expression vector of claim 2.
4. A method for producing an *C. albicans* polypeptide comprising culturing a cell of claim 3 under conditions that permit expression of the polypeptide.
- 15 5. An isolated nucleic acid comprising a nucleotide sequence encoding an *C. albicans* polypeptide or a fragment thereof, said nucleic acid selected from the group consisting of SEQ ID NO: 1 - SEQ ID NO: 14103.
- 20 6. A recombinant expression vector comprising the nucleic acid of claim 5 operably linked to a transcription regulatory element.
7. A cell comprising a recombinant expression vector of claim 6.
- 25 8. A method for producing an *C. albicans* polypeptide comprising culturing a cell of claim 7 under conditions that permit expression of the polypeptide.
- 30 9. A probe comprising a nucleotide sequence having at least 8 consecutive nucleotides of a nucleotide sequence selected from the group consisting of SEQ ID NO: 1 - SEQ ID NO: 14103.
10. An isolated nucleic acid comprising a nucleotide sequence of at least 8 nucleotides in length, wherein the sequence is hybridizable to a nucleic acid having a

nucleotide sequence selected from the group consisting of SEQ ID NO: 1 - SEQ ID NO: 14103.

11. A vaccine composition for prevention or treatment of an *C. albicans* infection comprising an effective amount of a nucleic acid of claim 5 and a pharmaceutically acceptable carrier.

12. A vaccine composition of claim 11, further comprising an adjuvant.

10 13. A vaccine composition of claim 11, further comprising one or more additional active ingredients.

14. A method of treating a subject for *C. albicans* infection comprising administering to a subject a vaccine composition of claim 11, 12 or 13, such that 15 treatment of *C. albicans* infection occurs.

15. A method of claim 14, wherein the treatment is a prophylactic treatment.

16. A method of claim 14, wherein the treatment is a therapeutic treatment.

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17. A recombinant or substantially pure preparation of an *C. albicans* polypeptide or a fragment thereof, wherein said polypeptide is selected from the group consisting of SEQ ID NO: 14104 - SEQ ID NO: 28206.

25 18. A vaccine composition for prevention or treatment of an *C. albicans* infection comprising an effective amount of an *C. albicans* polypeptide of claim 17 and a pharmaceutically acceptable carrier.

19. A vaccine composition of claim 18, further comprising an adjuvant.

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20. A vaccine composition of claim 18, further comprising one or more

additional active ingredients.

21. A method of treating a subject for *C. albicans* infection comprising administering to a subject a vaccine composition of claim 18, 19 or 20, such that
5 treatment of *C. albicans* infection occurs.

22. A method of claim 21, wherein the treatment is a prophylactic treatment.

10 23. A method of claim 21, wherein the treatment is a therapeutic treatment.

24. A method for detecting the presence of a *Candida* nucleic acid in a sample comprising:

15 (a) contacting a sample with a nucleic acid of claim 5 under conditions in which a hybrid can form between the probe and a *Candida* nucleic acid in the sample; and
(b) detecting the hybrid formed in step (a), wherein detection of a hybrid indicates the presence of a *Candida* nucleic acid in the sample.

20 25. A computer readable medium having recorded thereon the nucleotide sequences depicted in SEQ ID NO: 1 - SEQ ID NO: 14103 or fragments thereof.

26. A computer based system for identifying fragments of the *Candida* genome of commercial importance comprising the following elements;

25 a) a data storage means comprising the nucleotide sequences SEQ ID NO: 1 - SEQ ID NO: 14103 or fragments thereof,
b) a search means for comparing a target sequence to the nucleotide sequences of the data storage means of step (a) to identify homologous sequences, and;
30 c) a retrieval means for obtaining said homologous sequences(s) of step (b).

27. A method of identifying commercially important nucleic acid fragments of the *Candida* genome comprising the step of comparing a database comprising the nucleotide sequences SEQ ID NO: 1 - SEQ ID NO: 14103 or
5 fragments thereof with a target sequence to obtain a nucleic acid molecule comprised of a complementary nucleotide sequence to said target sequence, wherein said target sequence is not randomly selected.

28. A method for identifying an expression modulating fragment of the
10 *Candida* genome comprising the step of comparing a database comprising the nucleotide sequences SEQ ID NO: 1 - SEQ ID NO: 14103 or fragments thereof with a target sequence to obtain a nucleic acid molecule comprised of a complementary nucleotide sequence to said target sequence, wherein said target sequence comprises sequences known to regulate gene expression.